

## SEQUENCE LISTING

- <110> PROTEIN SPECIALTIES LTD.
  HSC RESEARCH AND DEVELOPMENT LIMITED PARTNERSHIP
- <120> SELF-ALIGNING PEPTIDES MODELED ON HUMAN ELASTIN AND OTHER FIBROUS PROTEINS
- <130> 041082/0112
- <140> PCT/US00/17829
- <141> 2000-06-29
- <150> 09/340,736
- <151> 1999-06-29
- <160> 11
- <170> PatentIn Ver. 2.1
- <210> 1
- <211> 731
- <212> PRT
- <213> Homo sapiens
- <400> 1
- Gly Gly Val Pro Gly Ala Ile Pro Gly Gly Val Pro Gly Gly Val Phe
  1 5 10 15
- Tyr Pro Gly Ala Gly Leu Gly Ala Leu Gly Gly Gly Ala Leu Gly Pro
  20 25 30
- Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala Gly Ala Gly
  35 40 45
- Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala 50 55 60
- Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Ala Tyr Lys Ala Ala 65 70 75 80
- Lys Ala Gly Ala Gly Leu Gly Gly Val Pro Gly Val Gly Gly Leu Gly 85 90 95
- Val Ser Ala Gly Ala Val Val Pro Gln Pro Gly Ala Gly Val Lys Pro
  100 105 110
- Gly Lys Val Pro Gly Val Gly Leu Pro Gly Val Tyr Pro Gly Gly Val 115 120 125
- Leu Pro Gly Ala Arg Phe Pro Gly Val Gly Val Leu Pro Gly Val Pro 130 135 140
- Thr Gly Ala Gly Val Lys Pro Lys Ala Pro Gly Val Gly Gly Ala Phe 145 150 155 160
- Ala Gly Ile Pro Gly Val Gly Pro Phe Gly Gly Pro Gln Pro Gly Val
  165 170 175

- Pro Leu Gly Tyr Pro Ile Lys Ala Pro Lys Leu Pro Gly Gly Tyr Gly
  180 185 190
- Leu Pro Tyr Thr Thr Gly Lys Leu Pro Tyr Gly Tyr Gly Pro Gly Gly 195 200 205
- Val Ala Gly Ala Ala Gly Lys Ala Gly Tyr Pro Thr Gly Thr Gly Val 210 220
- Gly Pro Gln Ala Ala Ala Ala Ala Ala Ala Lys Ala Ala Lys Phe 225 230 235 240
- Gly Ala Gly Ala Gly Val Leu Pro Gly Val Gly Gly Ala Gly Val
  245 250 255
- Pro Gly Val Pro Gly Ala Ile Pro Gly Ile Gly Gly Ile Ala Gly Val 260 265 270
- Lys Tyr Gly Ala Ala Ala Gly Leu Val Pro Gly Gly Pro Gly Phe Gly 290 295 300
- Pro Gly Val Val Gly Val Pro Gly Ala Gly Val Pro Gly Val Gly Val 305 310 315 320
- Pro Gly Ala Gly Ile Pro Val Val Pro Gly Ala Gly Ile Pro Gly Ala 325 330 335
- Ala Val Pro Gly Val Val Ser Pro Glu Ala Ala Ala Lys Ala Ala Ala 340 345 350
- Lys Ala Ala Lys Tyr Gly Ala Arg Pro Gly Val Gly Val Gly Gly Ile 355 360 365
- Pro Thr Tyr Gly Val Gly Ala Gly Gly Phe Pro Gly Phe Gly Val Gly 370 375 380
- Val Gly Gly Ile Pro Gly Val Ala Gly Val Pro Gly Val Gly Gly Val 385 390 395 400
- Pro Gly Val Gly Gly Val Pro Gly Val Gly Ile Ser Pro Glu Ala Gln 405 410 415
- Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Val Gly Thr Pro Ala 420 425 430
- Ala Ala Ala Lys Ala Ala Lys Ala Ala Gln Phe Gly Leu Val 435 440 445
- Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly 450 460
- Val Ala Pro Gly Val Gly Leu Ala Pro Gly Val Gly Val Ala Pro Gly
  465 470 475 480

- Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Ala Ile Gly Pro Gly
  485 490 495
- Gly Val Ala Ala Ala Lys Ser Ala Ala Lys Val Ala Ala Lys Ala
  500 505 510
- Gln Leu Arg Ala Ala Ala Gly Leu Gly Ala Gly Ile Pro Gly Leu Gly
  515 520 525
- Val Gly Val Gly Val Pro Gly Leu Gly Val Gly Ala Gly Val Pro Gly 530 540
- Leu Gly Val Gly Ala Gly Val Pro Gly Phe Gly Ala Gly Ala Asp Glu 545 550 555 556
- Gly Val Arg Arg Ser Leu Ser Pro Glu Leu Arg Glu Gly Asp Pro Ser 565 570 575
- Ser Ser Gln His Leu Pro Ser Thr Pro Ser Ser Pro Arg Val Pro Gly 580 585 590
- Ala Leu Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Val Pro Gly
  595 600 605
- Val Leu Gly Gly Leu Gly Ala Leu Gly Gly Val Gly Ile Pro Gly Gly 610 615 620
- Val Val Gly Ala Gly Pro Ala Ala Ala Ala Ala Ala Ala Ala Lys Ala Ala 625 630 635 640
- Ala Lys Ala Ala Gln Phe Gly Leu Val Gly Ala Ala Gly Leu Gly Gly 645 650 655
- Leu Gly Val Gly Gly Leu Gly Val Pro Gly Val Gly Gly Gly 660 665 670
- Ile Pro Pro Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Gly 675 680 685
- Leu Gly Gly Val Leu Gly Gly Ala Gly Gln Phe Pro Leu Gly Gly Val 690 695 700
- Ala Ala Arg Pro Gly Phe Gly Leu Ser Pro Ile Phe Pro Gly Gly Ala
  705 710 715 720
- Cys Leu Gly Lys Ala Cys Gly Arg Lys Arg Lys
  725 730
- <210> 2
- <211> 200
- <212> PRT
- <213> Artificial Sequence
- <2205
- <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 2

Phe Pro Gly Phe Gly Val Gly Val Gly Ile Pro Gly Val Ala Gly
1 5 10 15

Val Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val
20 25 30

Gly Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys
35 40 45

Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys 50 55 60

Ala Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val 65 70 75 80

Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro 85 90 95

Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val
100 105 110

Ala Pro Ala Ile Gly Pro Glu Ala Gln Ala Ala Ala Ala Lys Ala 115 120 125

Ala Lys Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Lys Ala Ala 130 135 140

Ala Lys Ala Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro 145 150 155 160

Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu 165 170 175

Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val 180 185 190

Gly Val Ala Pro Ala Ile Gly Pro 195 200

<210> 3

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 3

Lys Ala Ala Lys

1

<210> 4

<211> 5

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<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic
     polypeptide
<400> 4
Lys Ala Ala Lys
<210> 5
<211> 6
<212> PRT
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<223> Description of Artificial Sequence: Synthetic
     polypeptide
<400> 5
Pro Gly Val Gly Val Ala
 1
                 5
<210> 6
<211> 5
<212> PRT
<213> Artificial Sequence
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     polypeptide
<400> 6
Val Pro Gly Val Gly
 1
<210> 7
<211> 4
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic
     polypeptide
<400> 7
Val Pro Gly Gly
<210> 8
<211> 30
<212> PRT
<213> Artificial Sequence
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<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 8

Gly Gly Leu Gly Tyr Gly Gly Leu Gly Tyr Gly Gly Leu Gly Tyr Gly
1 5 10 15

Gly Leu Gly Tyr Gly Gly Leu Gly Tyr Gly Gly Leu Gly Tyr 20 25 30

<210> 9

<211> 117

<212> PRT

<213> Homo sapiens

<400> 9

Pro Gly Phe Gly Val Gly Val Gly Gly Ile Pro Gly Val Ala Gly Val

1 10 15

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
20 25 30

Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys Tyr 35 40 45

Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys Ala
50 55 60

Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val Gly 65 70 75 80

Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro Gly 85 90 95

Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala
100 105 110

Pro Ala Ile Gly Pro 115

<210> 10

<211> 118

<212> PRT

<213> Homo sapiens

<400> 10

Phe Pro Gly Phe Gly Val Gly Val Gly Ile Pro Gly Val Ala Gly
1 5 10 15

Val Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val 20 25 30

Gly Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys 35 40 45 Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys
50 55 60

Ala Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val 65 70 75 80

Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro 85 90 95

Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val
100 105 110

Ala Pro Ala Ile Gly Pro 115

<210> 11

<211> 199

<212> PRT

<213> Homo sapiens

<400> 11

Pro Gly Phe Gly Val Gly Val Gly Gly Ile Pro Gly Val Ala Gly Val

1 10 15

Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val Gly
20 25 30

Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys Tyr 35 40 45

Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Lys Ala 50 55 60

Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val Gly 65 70 75 80

Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro Gly 85 90 95

Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala
100 105 110

Pro Ala Ile Gly Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala 115 120 125

Lys Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Ala 130 135 140

Lys Ala Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly 145 150 155 160

Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala 165 170 175 Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly 180 185 190

Val Ala Pro Ala Ile Gly Pro 195